EXECUTIVE SUMMARY

Introduction

The Texas Department of State Health Services, in inter-agency committee (i.e., the State Nutrition Action Plan, or SNAP), contracted SUMA/Orchard Social Marketing, Inc. (SOSM) to conduct research statewide among parents of school children who receive Food Stamps, WIC, or nutrition assistance; child care providers who receive monies from USDA food assistance programs such as the Child and Adult Nutrition Assistance Program; and nutrition educators, including those working with WIC, Food Banks, and the Agricultural Extension Agency (AgriLife). The purpose of the research was to gather information to inform SNAP's efforts to unify nutrition messages across USDA programs, including a possible media campaign.

This report contains findings from focus groups conducted among low-income parents of children age ten or under and child care providers across Texas; statewide telephone surveys with child care providers and parents (including a subset of higher-income parents to be used as a basis of comparison); and interviews with nutrition education stakeholders. It also offers recommendations about nutrition messages for parents and child care providers, as well as modes of distribution.

Summary of Findings: Parents

SOSM conducted twelve focus groups with low-income parents of children age ten or under in Houston, San Antonio, the Rio Grande Valley, Austin, Fort Worth, and El Paso. Nine of the focus groups were conducted in English and three in Spanish (with Spanish-dominant parents). In addition, 1,603 parents answered telephone surveys about their families' nutrition and exercise habits; an additional 377 higher-income parents answered the survey to provide a basis of comparison. Lines of inquiry for focus groups included questions about general shopping and food preparation, perceptions of "healthy" foods, the challenges parents face in serving fruits, vegetables, and whole grains, and opinions about specific educational and media campaign materials.

Focus group participants indicated that in most cases, they know what is and what is not healthy fare for their families. However, they also vividly described the challenges and struggles they face in providing healthy foods to their families, and the richness of the anecdotes they shared provided additional validity to these everyday struggles. The themes that emerged became a topic of conversation throughout all focus group discussions. More specifically, they discussed challenges revolving around the following themes.

- Preparing multiple meals to satisfy various family members, including picky eaters
- Lack of practical knowledge, including knowledge of healthy foods, knowledge of how to cook them, and access to recipes
- Finding time to cook



- The cost of healthy foods (as well as the perception that "healthy" foods are more expensive)
- Managing dietary concerns caused by a health crisis such as obesity or diabetes

Those parents facing the challenge of obesity or obesity-related diseases within the family took the lead in articulating their struggles to change the way their families eat. A subtheme that emerged from these discussions, as well as from those involving managing children's tastes and desires, is that mothers need to feel they have the knowledge, power, and security to manage both the health-related and disciplinary aspects of these issues. For that reason, the State of California's *Champions for Change* advertisement, in which a mother states firmly, "This is MY kitchen," tested particularly well. In contrast, the *Champions for Change* call to action to demand healthy foods at schools and in grocery stores fell somewhat flat.

Most tellingly, the most popular material tested with these parents was a cookbook entitled *Let's Cook with Fruits and Vegetables*. Illustrated with attractive and colorful photographs, this bilingual (Spanish/English) cookbook offers a wide variety of recipes with few ingredients that can be prepared with relative ease. Almost without exception, parents expressed great enthusiasm for the book.

The telephone survey yielded a large volume of data reported in the body of this document. As might be expected, poverty is the leading indicator of whether or not parents report that their children have healthy diets. Respondents with incomes over the federal poverty level (FPL) are substantially more likely to eat fruits and vegetables at every meal and snack than are those with incomes under the FPL; almost twice as likely to have reduced-fat or low-fat milk; and a third more likely to eat wheat bread. However, those under the FPL are more likely to consume juice rather than soda. In fact, the findings are consistent across all available measures in the survey of socioeconomic status (SES), including education as well as FPL.

When parents who completed the telephone survey were asked about the challenges they face in feeding their children more fruits and vegetables, their responses echoed those of the focus groups, with taste and cost being cited most frequently as reasons for not serving more fruits and vegetables. However, unlike the focus group participants, who willingly admitted and lamented the difficulty of regularly providing healthy meals for their families, telephone respondents tended to say that their children receive the required amounts of fruits and vegetables, with vegetable consumption lagging slightly behind fruit consumption. This report offers a possible explanation for why so many telephone respondents made this claim—namely, the "social desirability factor," whereby people over report healthy behavior in order to gain greater acceptance.

Another significant finding from the telephone survey with parents is that, while the responses of Hispanics overall do not differ significantly from those of other groups, a closer look indicates that there are significant differences between *Spanish-dominant* respondents and *English-dominant* respondents. The telephone survey corroborated findings from focus groups that the profile of Hispanics changes as they acculturate. Spanish-dominant respondents were significantly less likely than both Hispanic and non-Hispanic English-dominant respondents to say that they eat



two types of fruits per day, two types of vegetables per day, and white bread, and more likely to report that they drink reduced-fat milk. Hispanics who spoke Spanish during the survey were much more likely than both Hispanic and non-Hispanic English speakers to say that their families do not eat more fruits and vegetables because of taste or expense, but also because they are not in the habit or have concerns about quality. Descriptions of typical meals differed substantially across focus groups. This is strongly suggestive of a need to create different kinds of media and educational outreach materials for Spanish- and English-dominant audiences.

Across the spectrum of foods, no clear pattern emerged to indicate that those who eat or drink particular healthy foods or beverages would necessarily partake of other healthy foods or beverages. However, these findings do indicate a strong trend, in that children's dietary habits closely resemble those of their parents. Parents with good eating habits tend to have children with good eating habits, and parents with poor eating habits tend to have children who follow suit. In a related finding, parents who exercise more have a greater tendency than those who exercise less to report nutritious eating habits among their children.

Along the lines of family lifestyle, the telephone survey was consistent with past national and other studies (see footnoted references in the body of the report), in finding a strong and consistent correlation between eating habits and habits regarding television viewing during meals. While the link is probably not causal, meaning that watching television does not "cause" children to forgo fruits and vegetables, or vice versa, the link may point to some of the challenges parents described in focus groups, including having a lifestyle with much to do in too little time. Difficulty in planning healthy meals because of the challenges posed by work and busy school schedules, along with a lack of discipline in other areas of life, quite likely correlate to parents who have trouble engaging in healthy practices themselves, and who likewise have trouble getting their children to eat more formal meals, turn off the television, exercise, or eat healthy foods.

A final significant finding regarding the changing dietary habits of children as they grow from infants and toddlers to preschoolers and schoolchildren is indicated by a stair-step increase in the amount of soda children drink and a concurrent reduction in the amount of juice they drink as they get older. This age-related drop in fruit juice consumption and rise in the consumption of soda and other soft drinks is dramatic. For every eight children under the age of three who drink more juice than soda, only one child over age ten drinks more juice than soda.

Older children drink less 100% fruit juice than younger children, giving the impression that, as they become teens and young adults, their adoption of parental eating habits in the form of drinking more soda is practically a rite of passage.

Summary of Findings: Child Care Providers

Child care providers from the six locations listed below participated in focus groups during June and July 2008, allowing us to identify key issues to quantify.

• Midland/Odessa



- El Paso
- Austin
- San Antonio
- Houston
- Arlington (Dallas/Fort Worth)

Subsequently, a quantitative telephone survey was crafted to determine the prevalence of attitudes, perceptions, beliefs, and daily practices related to the Child Nutrition Program; reactions to proposed policy changes aligned with the Healthy Snack Initiative of the United States Department of Agriculture; and needs for training and technical assistance. The findings in this report are quantitative, with qualitative data inserted to further detail the findings.

Children attending child care in registered homes eat differently than children in larger child care centers. For example, though only marginally more likely to serve milk at every meal, homes are significantly more likely to serve bread and 20 percentage points more likely to serve whole wheat bread than child care centers. Perhaps a more startling finding is that, while home care providers reported serving fruits and vegetables at nearly every meal and snack, centers providers reported serving fruits and vegetables at only a little over half of their meals and snacks.

One of the strongest factors behind those differences is a significant difference in the way proprietors purchase food. Larger child care centers that depend on food wholesalers serve fewer fruits and vegetables than those that get food from discount "club" stores such as Sam's or Costco, or home providers who shop in neighborhood supermarkets. Children at centers that use suppliers consume only two thirds of the amounts of fruits and vegetables eaten by children at centers of similar size that are not provided by a wholesale supplier. These children also eat significantly less bread, and when they do, significantly more of it is white bread.

Be that as it may, respondents from child care centers are significantly more likely than home providers to teach about healthy eating; they also tend to have the structure to teach about it through lesson plans, toys, and specific activities regarding healthy eating. Children in child care centers also tend to get more outside play and physical activity than children in homes.

Qualitatively, child care providers working in larger, more professionalized settings may belong to trade organizations, such as the Texas Association for the Education of Young Children, which offers standards, professional training, continuing education, and other advantages that may or may not be accessible to the registered home provider. In discussions about training needs, for example, these kinds of associations were mentioned by participants who were more obviously educated about child development and nutrition.

The SES of the owner offers an important clue as to the types of food they provide to the children in their care. While the survey did not directly measure SES, two proxy measures were taken: respondent education and whether or not the respondent accesses the Internet. These two measures correlate strongly with income; education is one dimension of SES. The effect of SES is mixed: High SES is associated with greater provision of bread at day care, specifically whole wheat bread, as well as higher rates of breast milk provided to infants by their mothers.



However, higher-SES respondents reported much lower rates of fruit and vegetable provision than did respondents with lower SES.

In focus groups, one of the more obvious manifestations of this disparity emerged in discussions about how respondents like to learn more about the nutritional values of foods to better plan for the children's meals and snacks. Often, one participant would discuss a recipe or idea found on the Internet, only to have another participant retort that not everyone has access to computers. These data show that registered home operators are significantly less likely to have access to computers or Internet than those operating larger child care centers.

The vast majority of respondents to the telephone survey said a policy change that would require a fruit or vegetable serving at every snack would be good for the children they serve. It should be noted that 65% of respondents said that they serve a fruit or vegetable at every snack already. Nevertheless, the proposed change garners widespread support among those who presently do not serve a fruit or vegetable at every snack.

Child care providers expressed a strong need for more training and tools, especially recipes, menus, activities, and lesson plans. In focus group discussions, participants across the state agreed that while they understand and approve of the policy changes resulting from the Healthy Snack Initiative in principle, they would need training to implement them. In particular, participants expressed strong concerns about the cost of implementing such a policy and said they would need suggestions, recipes, and other tips for providing snack variety and snacks that are filling. Medium to large center providers often cited training for cooks as a need, especially in light of the relatively high turnover in this position. Other training needs mentioned related to kitchen math, measuring, food storage, and avoidance of cross-contamination.

These findings also quantify anecdotal evidence gathered in focus groups that strongly suggest that training methods differ greatly between home and center providers. A significant number of home providers have limited or no Internet access and little time for off-site training. Limited budgets for training across the board call for more cost-effective local events or on-site visits for the hands-on training and demonstrations preferred by some providers. On the other hand, those with Internet access expressed a strong preference for Internet-based distance learning options. Both audiences could receive video or CD training to be viewed on television.

It is interesting to note that one significant finding suggests that those child care centers with partnerships for nutrition education, whether with WIC, AgriLife, Texas Agricultural Extension, or other government organizations, serve more fruits and vegetables than those without such partnerships. This points to the potential positive outcomes of promoting these partnerships by duplicating the collaborative efforts made at the State level within the SNAP group, at the regional or local level.

Finally, the child care providers who participated in the focus groups expressed widespread negativity about the way parents feed their children, and this attitude was signficantly corroborated in the telephone survey. In all focus groups, discussions arose spontaneously among child care providers about the eating habits of the children when they are outside of their



care. They reported that many parents do not feed their children properly, citing a lack of time to do so. Many children come to school hungry or with "junk food," such as candy, donuts, fast food, and other undesirable foods. Furthermore, providers often feel a responsibility to feed the children more on Fridays because they fear they will not eat well over the weekend. They also say parents are often surprised to learn about the vegetables and fruits their children willingly eat in child care. In conclusion, they expressed strong opinions that parents should be the target of the media campaign, not child care providers, who do their best with limited funds to offer what they view as healthy foods.

On average, 84% of child care providers said it is either "very" or "somewhat" true that their children are hungry when they arrive at the center. A significant majority also said that the only real meals children get are at the center; that parents do not give their children fruits and vegetables; and that children come to school with junk food. Importantly, respondents who said that at least half of their children are enrolled in government programs reported higher percentages of poor eating habits outside of the center, across every question asked in this battery.

In line with their frequently expressed mistrust of the nutrition provided by parents, participants in all focus groups requested training and technical assistance in educating parents. In addition to handouts, video presentations, and other giveaways for parents, providers suggested that they need assistance with more delicate interpersonal issues with parents, such as boundary-setting over what foods may be brought into the center, and working with them appropriately to properly train their children to eat nutritious foods.